

Mass Facilities – National Visibility



MassDEP strengthens links to EPA

Massachusetts DEP has recently implemented new data exchanges with EPA using funding from the EPA Exchange Network grants program. These new data exchanges improve how information is exchanged between DEP and EPA and result in higher quality data served in a more timely fashion.

Background

The US Environmental Protection Agency requests state environmental agencies to provide an inventory of the facilities, sites, or places that are subject to environmental regulation or of environmental interest. EPA uses this information to compile a comprehensive national inventory of registered facilities which is stored in their Facility Registry System (FRS) and is used for a variety of purposes, including disseminating this information to the public via the EPA website.

This process of updating the national FRS system to ensure that facility information at EPA is always up-to-date has been a burden to states. In addition, data can quickly become “out of synch” as facility information is updated at the state but not updated at EPA in a timely manner. To relieve this burden, MassDEP has built upon a new mechanism being adopted by many state agencies to allow EPA to retrieve up-to-date facility information directly from MassDEP.

The Project Story

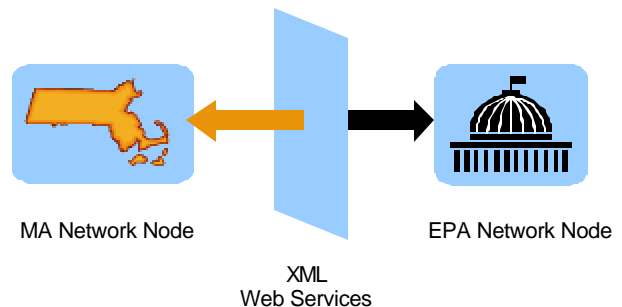
Technology

The National Environmental Information Exchange Network is a secure Internet and standards-based approach for exchanging environmental data and improving environmental decisions. The US EPA, State environmental departments, and US tribes and territories are partnering to build the Exchange Network to increase access to environmental data and make the exchange of data more efficient.

Since 2002, the EPA has been supporting the implementation of the Exchange Network through its grant program. The grants allow for preparation of data in addition to transmission of data across the network.

The Basic Exchange

This Exchange Network architecture takes a standards-based approach and uses the technologies of XML and Web Services. These technologies are used to implement the interface between the MassDEP database and the EPA systems, so that disparate computer systems can successfully communicate.



Computer systems at MassDEP and the EPA communicate using a standards based interface

Using these mechanisms, EPA retrieves FRS data directly from MassDEP on a scheduled basis. This is done over the Internet using MassDEP's Exchange Network Node. Using this "come and get it" approach, MassDEP does not need to be notified or involved each time EPA requests the latest update of MassDEP facilities. The information is automatically retrieved from the Massachusetts database, formatted according to the appropriate XML standards, and transmitted over the network. Currently, information is transmitted concerning air emissions and hazardous waste handlers.

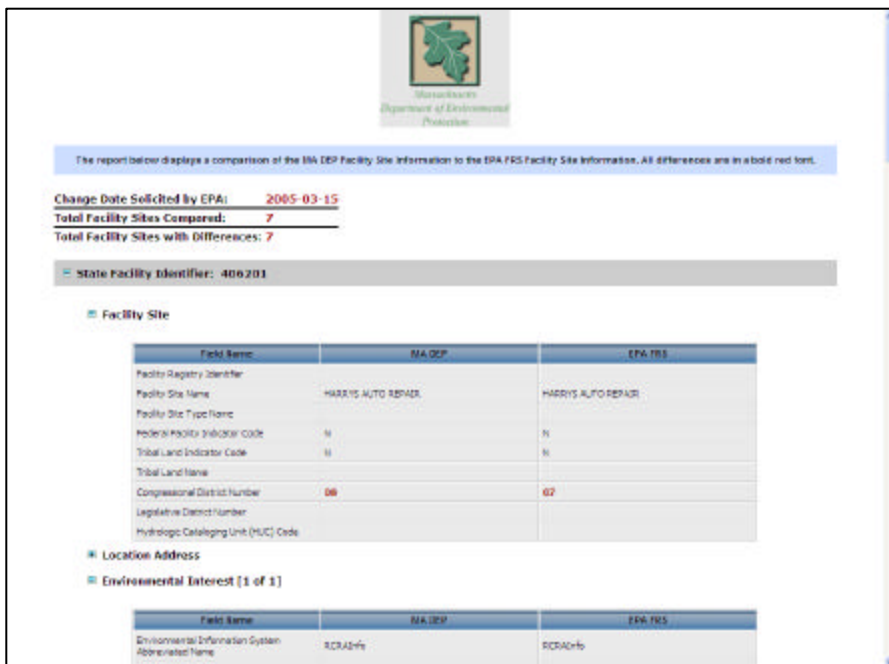
The Project Story, continued

Going One Step Further

This new approach will realize immediate benefits for MassDEP and EPA. For example, MassDEP saves staff time by only entering data once. And increasing the utility of existing systems lessens the demand for new computer resources. EPA gets more timely data from the source of record.

MassDEP decided to go one step further to solve another business problem - many times after facility data is exchanged from states to EPA, that facility information gets updated at EPA, either through EPA validation of the data or updates from EPA-managed environmental programs. MassDEP wanted a way to be notified any time a facility record was updated at EPA after that information has been submitted.

To solve the problem, MassDEP again relied on Exchange Network technologies to request the latest facility information from EPA's FRS system via their Exchange Network Node. This request to EPA is automatically scheduled some period of time after the original information was sent by MassDEP. The facility information (stored in XML) that is retrieved is compared to the original facility information (also in XML). This comparison identifies any discrepancies and, using XML style sheet technology, converts the comparison XML into an html file, which is automatically emailed to MassDEP program staff. The end result is that the MassDEP staff can visually compare discrepancies between facility information stored locally at their state and facility information stored at the EPA. This alerts them to any discrepancies and gives them an opportunity to review the facilities in question and make any corrections necessary.



The report below displays a comparison of the MA DEP Facility Site information to the EPA FRS Facility Site information. All differences are in a bold red font.

Change Date Solicited by EPA: **2005-03-15**
Total Facility Sites Compared: **7**
Total Facility Sites with Differences: **7**

State Facility Identifier: 406201

Facility Site

Field Name	MA DEP	EPA FRS
Facility Registry Identifier		
Facility Site Name	HARRIS AUTO REPAIR	HARRIS AUTO REPAIR
Facility Site Type Name		
Federal Facility Identifier Code	11	11
Tribal Land Indicator Code	11	11
Tribal Land Name		
Congressional District Number	06	07
Legislative District Number		
Hydrologic Cataloging Unit (HUC) Code		

Location Address

Environmental Interest [1 of 1]

Field Name	MA DEP	EPA FRS
Environmental Information System Abbreviated Name	RCRAChf6	RCRAChf6

Facility Comparison Report Highlighting Discrepancies (in red) Between EPA and MADEP Data Systems

Benefits

- Greater staff efficiency through automation
- Better utilization of existing systems
- Timely data transfers
- High quality data to the public

Future Plans

- Add interfaces to additional systems
- Increase automatic comparison capabilities
- Add other types of facilities to the FRS flow

Massachusetts Department of Environmental Protection

One Winter St
Boston, MA 02108

For more information contact:
Dan.Scavozze@state.ma.us
617-574-6821

